AMENDMENTS TO THE CLAIMS

Claims 1-40 are pending for this application. The Applicant requests reconsideration of the claims in view of the following amendments to the claims as shown below.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Currently Amended)   A method for processing received signals in a communication system, the method comprising:

generating a plurality of upstream <u>narrowband</u> analog signals for a received signal;

[[acquiring upstream analog information related to at least a portion of said generated plurality of upstream analog signals; and]]

<u>converting at least two of said generated plurality of upstream narrowband analog signals for a channel to a plurality of corresponding digital signals;</u>

<u>computing a power of said received signal based on said plurality of corresponding digital signals; and</u>

adjusting a gain for said received signal using [[at least a portion of said acquired upstream analog information]] <u>said computed power.</u>

2.   (Currently Amended)   The method according to claim 1, [[further]] comprising low pass filtering said received signal.

3.   (Cancelled)

4.   (Currently Amended)   The method according to claim 1, [[further]] comprising acquiring at least one <u>digital</u> sample from at least a portion said [[generated plurality of upstream analog]] <u>plurality of corresponding digital</u> signals.

5.   (Cancelled)

6.   (Currently Amended) The method according to claim 1 [[5]], [[further]] comprising determining when at least one of said generated plurality of upstream narrowband analog signals is clipped.

7.   (Currently Amended) The method according to claim 1 [[6]], [[further]] comprising generating an intermediate gain based on said computed power [[of said acquired at least one sample]].

8.   (Currently Amended) The method according to claim 7, [[further]] comprising applying said generated intermediate gain to said at least one of said generated plurality of upstream narrowband analog signals.

9.   (Currently Amended) The method according to claim 1 [[5]], [[further]] comprising comparing said computed power to a plurality of defined power values.

10.   (Currently Amended) The method according to claim 9, [[further]] comprising selecting a gain based on a comparable power value of said plurality of defined power values.

11.   (Currently Amended) The method according to claim 9, [[further]] comprising storing said defined power values in a lookup table.

12.   (Currently Amended) The method according to claim 1, [[further]] comprising applying a final gain to said received signal, wherein said final gain is applied after processing signals upon which intermediate gain has been applied.

13.   (Cancelled)

14.　(Currently Amended)　A machine-readable storage having stored thereon, a computer program having at least one code section for processing received signals in a communication system, the at least one code section being executable by a machine for causing the machine to perform steps comprising:

generating a plurality of upstream narrowband analog signals for a received signal;

[[acquiring upstream analog information related to at least a portion of said generated plurality of upstream analog signals; and]]

converting at least two of said generated plurality of upstream narrowband analog signals for a channel to a plurality of corresponding digital signals;

computing a power of said received signal based on said plurality of corresponding digital signals; and

adjusting a gain for said received signal using [[at least a portion of said acquired upstream analog information]] said computed power.

15.　(Currently Amended)　The machine-readable storage according to claim 14, [[further]] comprising code for low pass filtering said received signal.

16.　(Cancelled)

17.　(Currently Amended)　The machine-readable storage according to claim 14, [[further]] comprising code for acquiring at least one digital sample from at least a portion said [[generated plurality of upstream analog]] plurality of corresponding digital signals.

18.　(Cancelled)

19.　(Currently Amended)　The machine-readable storage according to claim 14 [[18]], [[further]] comprising code for determining when at least one of said generated plurality of upstream narrowband analog signals is clipped.

20.   (Currently Amended) The machine-readable storage according to claim 14 [[19]], [[further]] comprising code for generating an intermediate gain based on said computed power [[of said acquired at least one sample]].

21.   (Currently Amended) The machine-readable storage according to claim 20, [[further]] comprising code for applying said generated intermediate gain to said at least one of said generated plurality of upstream narrowband analog signals.

22.   (Currently Amended) The machine-readable storage according to claim 14 [[18]], [[further]] comprising code for comparing said computed power to a plurality of defined power values.

23.   (Currently Amended) The machine-readable storage according to claim 22, [[further]] comprising code for selecting a gain based on a comparable power value of said plurality of defined power values.

24.   (Currently Amended) The machine-readable storage according to claim 22, [[further]] comprising code for storing said defined power values in a lookup table.

25.   (Currently Amended) The machine-readable storage according to claim 14, [[further]] comprising code for applying a final gain to said received signal, wherein said final gain is applied after processing signals upon which intermediate gain has been applied.

26.   (Cancelled)

27.   (Currently Amended) A system for processing received signals in a communication system, the system comprising:
       a receiver that generates a plurality of upstream narrowband analog signals for a received signal;

[[at least one processor that acquires upstream analog information related to at least a portion of said generated plurality of upstream analog signals; and]]

a plurality of analog-to-digital converters that convert at least two of said generated plurality of upstream narrowband analog signals for a channel to a plurality of corresponding digital signals;

at least one processor that computes power of said received signal based on said plurality of corresponding digital signals; and

at least one automatic gain controller that adjusts a gain for said received signal using at least a portion of said [[acquired upstream analog]] digital information.

28.   (Currently Amended)   The system according to claim 27, [[further]] comprising at least one low pass filter that filters said received signal.

29.   (Cancelled)

30.   (Currently Amended) The system according to claim 27, wherein said at least one processor acquires at least one digital sample from at least a portion of said [[generated plurality of upstream analog]] plurality of corresponding digital signals.

31.   (Cancelled)

32.   (Currently Amended) The [[method]] system according to claim 27 [[31]], wherein said at least one processor determines when at least one of said generated plurality of upstream narrowband analog signals is clipped.

33.   (Currently Amended) The system according to claim 27 [[32]], wherein said at least one automatic gain controller generates an intermediate gain based on said computed power [[of said acquired at least one sample]].

34.   (Currently Amended) The system according to claim 33, wherein said at least one processor applies said generated intermediate gain to said at least one of said generated plurality of upstream underline narrowband underline analog signals.

35.   (Currently Amended) The system according to claim underline 27 [[31]], wherein said at least one processor compares said computed power to a plurality of defined power values.

36.   (Original) The system according to claim 35, wherein said at least one processor selects a gain based on a comparable power value of said plurality of defined power values.

37.   (Currently Amended) The system according to claim 35, [[further]] comprising a lookup table that stores said defined power values.

38.   (Currently Amended) The system according to claim 27, wherein said automatic gain controller applies a final gain to said received signal_, wherein said final gain is applied after processing signals upon which intermediate gain has been applied.

39.   (Cancelled)

40.   (Currently Amended) A system for processing received signals in a communication system, the system comprising:

a mixer;

a low pass filter underline directly electrically underline coupled to said mixer; and

a plurality of gain controllers serially coupled to an output of said low pass filter; and

a plurality of analog to digital converters, wherein:

an input of a first of said plurality of analog-to-digital converters is underline directly electrically underline coupled to said output of said low pass filter; and

an input of each of a remaining portion of said plurality of analog-to-digital converters is individually <u>directly electrically</u> coupled to a corresponding output of each of said serially coupled plurality of gain controllers.